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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/579,864	05/25/2000	Brent C. Hawks	STL9-2000-0034US1	9641
47069 7590 08/04/2010 KONRAD RAYNES & VICTOR, LLP ATTN: IBM54 315 SOUTH BEVERLY DRIVE, SUITE 210 BEVERLY HILLS, CA 90212				
EXAMINER				
MIRZA, ADNAN M				
ART UNIT		PAPER NUMBER		
2445				
NOTIFICATION DATE		DELIVERY MODE		
08/04/2010		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

[krvuspto@ipmatters.com](mailto:krvuspto@ipmatters.com)

### Office Action Summary

**Application No.**

09/579,864

**Applicant(s)**

HAWKS ET AL.

**Examiner**

ADNAN MIRZA

**Art Unit**

2445

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 May 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,9-14, 21-24 and 31-50 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,9-14, 21-24 and 31-50 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/C)
- Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. The instant application having Application 09579864 has a total of 29 claims pending in the application; there are 3 independent claim and 26 dependent claims, all of which are ready for examination by the examiner. This office action is in response to the applicant's Non-Final rejection filed on May 24 2010.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 9-14, 21-24, 31-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Xu et al (U.S. 6,081,837) and Crozier (U.S. 5,392,390).

As per claims 1,31,22-24,38-41,48-50 Xu disclosed a method providing information describing a file system connection between a local file system located on local system and a host file system located on a host system, said method comprising: encoding a local system data structure comprising at least one tag representing the local file system; encoding a host system data structure comprising at least one tag representing the host file system, and encoding a mapping data structure comprising at least one tag representing a mapping between a file in the local file system and a file in the host file system (Col. 9, lines 6-20). Wherein the tags are in a meta language format, and

wherein each tag has an identifier and a set of one or more attributes and wherein the encoded local system data structures, host system data structure, host system data structure, host system data structure (col. 8, lines 57-64), and mapping data structure forms a file system connection descriptor; and mapping data structure forms a file system connection descriptor; and using the file system connection descriptor to access the host file indicated in the mapping data structure (col. 14, lines 9-23) by using the mapping data structure to determine a pattern describing a host file system type that maps to a local file system type, wherein the transfer type for the pattern defines how data is transferred between a host file of the host file system having the determined pattern to the local file system in which local file system applies (col. 16, lines 24-31).

However Xu did not disclose in detail a transfer type that defines a data format for transferring data between the host system and local system to support remote editing of files in the host file system from the local file system.

In the same field of endeavor Crozier disclosed, "The invention features a method for translating computer data from a source record structure to a different destination record structure. The method comprises the steps of first establishing a mapping between the fields of the two record structures by presenting the names of the fields of each of the record structures on a display and allowing a user to specify the correspondence between pairs of fields. The actual translations of files then makes use

of this mapping to translate the data of a file from the source record structure to the destination record structure (col. 4, lines 3-13).

It would have been obvious to one having ordinary skill in the art at the time of the invention was made to have incorporated the invention features a method for translating computer data from a source record structure to a different destination record structure. The method comprises the steps of first establishing a mapping between the fields of the two record structures by presenting the names of the fields of each of the record structures on a display and allowing a user to specify the correspondence between pairs of fields. The actual translations of files then makes use of this mapping to translate the data of a file from the source record structure to the destination record structure as taught by Crozier in the method and system of Xu to reduce and improve the process of connecting, mapping and converting files and directories from a one file system to second file system.

4. As per claims 9,32,42 Xu-Crozier disclosed wherein the mapping data structure comprises a local file extension data structure storing a local file extension (Cozier, col. 9, lines 42-49); a host file pattern data structure storing a pattern describing a host file to which the local file extension will be applied (Cozier, Col. 10, lines 15-24).

5. As per claims 10,33,43 Xu-Crozier disclosed wherein the mapping data structure further comprises a host codepage data structure storing an identification of a host

codepage in which data in the host file is encoded (Xu, col. 15, lines 16-21); and a local-codepage data structure storing an identification of a local codepage in which data in a local file is encoded (Xu, col. 15, lines 24-33).

6. As per claims 11,34,44 Xu-Crozier wherein the host system data structure comprises: a data structure storing an identification of the host system; a data structure storing an identification of a user of the host system (Xu, col. 21, lines 15-26); a data structure storing an identification of a preferred drive on the local system; and a data structure storing an indication that the preferred drive be automatically connected by default when a remote connection is established with the host system(Xu, Col. 25, lines 16-31).

7. As per claims 12,35,45 Xu-Crozier disclosed wherein the host system data structure further comprises data storing an identification of a list of qualifier data structures, wherein each qualifier data structure stores a qualifier name, a name identifying directory on the host system (Xu, col. 6, lines 3-17), and an identification of the file attributes of a file located in the host system directory (Xu, col. 8, lines 57-64).

8. As per claims 13,36,46 Xu-Crozier disclosed the file system connection descriptor encoded in a tagged meta language document comprising one or more tags, each tag having an identifier and a set of one or more attributes (Xu, col. 8, lines 57-64).

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9. As per claims 14,37,47 Xu-Crozier disclosed wherein the tagged meta language is Extensible Markup Language (XML) (Xu, col. 8, lines 57-64). One having ordinary skill in the art at the time of the invention understands XML as being part of the metadata format.

### ***Response to Arguments***

Applicant's arguments filed 05/24/2010 have been fully considered but they are not persuasive. Response to applicant's arguments is as follows.

A. Applicant argued that Xu did not disclose, "tags in metalanguage format for a local system data structure, a host system data structure, a mapping data structure, and a transfer type.

As to applicant's argument Xu taught,

The term metadata refers to information about the data, and the term metadata is inclusive of file access information and file attributes. The file access information includes the  
60 locks upon the files or blocks of data in the files. The file attributes include pointers to where the data is stored in the cached disk array. The communication of metadata between the data movers 41, 42 is designated by the dotted line interconnection in FIGS. 1 to 4.

col. 8, lines 57-64. From

the above excerpt it is apparent that meta language format is utilized to portray the information about the file data as well as file access information and file attributes.

B. Applicant argued that Xu nowhere disclosed, "a local file system data structure representing a local file system, a host file system data structure representing a host file system, and a mapping data structure between the files in the local file system and files in the host file system, and a transfer type, where all these data structures comprising tags in a meta language format that form a file system connection descriptor".

As to applicant's argument Xu disclosed,

The random access memory 202 functions as a cache memory for access to the file system mapping table 212, client/user information 213, and programs 211 in the local disk storage 203. Therefore, the random access memory includes programs 221, a file system mapping table 222, and client/user information 223 that is loaded from the local disk storage 203 for random access by the data processor 201. The random access memory 202 also stores file system information 224 for file systems owned by the data mover 81. This file system information includes a directory of the files in the file systems, and attributes of the files including file access attributes, pointers to where the file data resides in the cached disk array storing the file system, and locking information. A nonvolatile copy of the file system information 224 for each file system owned by the data mover 81 is (col. 20, lines 63-67).

In the above excerpts from Xu's disclosure, it is clearly evident that data mover utilizes the mapping table to point to data structure between local and host file systems.

C. Applicant argued further that Xu did not disclose, "these different local system, host system, and mapping data structures and a transfer type are used to support remote editing of files in the host file system from the local file system, Instead, the cited Xu discusses how the pointers are used to read or write data over a path.



As to applicant's argument Xu reference disclosed,

data mover owning the file system places any required lock on the file, and returns metadata including pointers to data in the file system to be accessed. For example, once the first data mover 41 receives the pointers to the data to be accessed in the second file system 44, then the first data mover communicates read or write data over the bypass path 48. For a read operation, the first data mover 41 sends a read command over the data bypass path 48 to the file system 44. In response, read data from the file system 44 is returned over the data bypass path 48, and the first data mover 41 forwards the read data to the first client 46. For a write operation, the first data mover 41 receives write data from the first client, and forwards the write data over the data bypass path 48 to be written in the second file system 44. The first data mover 41 transmits the write data in a write command including the pointers from the metadata received from the second data mover 42. (col. 9, liens 6-20).

D. Applicant argued that prior art did not disclose, "a local file system data structure, host system data structure, and mapping data structure as comprising tags in a meta language format forming a file system connection descriptor to support remote editing of files in the host file system from the local file system.

As to applicant's argument Xu's reference disclosed,

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data mover owning the file system places any required lock on the file, and returns metadata including pointers to data in the file system to be accessed. For example, once the first data mover 41 receives the pointers to the data to be accessed in the second file system 44, then the first data mover communicates read or write data over the bypass path 48. For a read operation, the first data mover 41 sends a read command over the data bypass path 48 to the file system 44. In response, read data from the file system 44 is returned over the data bypass path 48, and the first data mover 41 forwards the read data to the first client 46. For a write operation, the first data mover 41 receives write data from the first client, and forwards the write data over the data bypass path 48 to be written in the second file system 44. The first data mover 41 transmits the write data in a write command including the pointers from the metadata received from the second data mover 42.

(col. 9, lines 6-20).

Regarding the applicant's argument, Page. 7 lines 21-24 of the specification define the system connection descriptor is simply the mapping table within the data structure that contains pointers or tags to map files between lo0cal and host file system.

F. Applicant argued that prior art did not disclose, "mapping data structure to determine a pattern describing a host file system type that maps to a local file system type, wherein the transfer type for the pattern defines how data is transferred between a host file of the host file system having the determined pattern to the local file system in which local file system applies.

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As to applicant's argument Xu disclosed,

25 With reference to FIG. 7, there is shown a flowchart of a preferred method of processing the CIFS request sequence by allocation of tasks between the Forwarder and the Owner. In a first step 131, in response to a file access request from a client, the network opens a TCP connection between the client and the server for NETBIOS transport over the TCP  
30 connection. As described in Leach, Appendix A, p. 119-120, this includes resolving the server name in the client request to an IP address of the Forwarder, and establishing a connection between the client and the Forwarder if a connection has not already been set up. Connection establish-  
35 ment is done using the NETBIOS session service, which requires the client to provide a "calling name" and a "called name."

(col. 16, lines 24-31).

### ***Conclusion***

**10. THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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11. Any inquiry concerning this communication or earlier communication from the examiner should be directed to Adnan Mirza whose telephone number is (571)-272-3885.

12. The examiner can normally be reached on Monday to Friday during normal business hours. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, SRIVASTAVA VIVEK can be reached on (571)-272-7304. The fax for this group is (703)-746-7239. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

13. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for un published applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at (866)-217-9197 (toll-free).

/ADNAN MIRZA/

Examiner, Art Unit 2445

/Patrice L Winder/

Primary Examiner, Art Unit 2445